



a70 • z70 Thermal Imager Specifications

Model Number	a70 Series Chief Inspector	z70 Series Chief Inspector
	Full Feature Series Specifications	
Frame Rate	9Hz	30Hz*
Sensor Info		
Detector	Uncooled Microbolometer Focal Plane Array (FPA)	
Resolution/Pixel Size	384 x 288	
Spectral Range	8 - 14µm	
Thermal Sensitivity	0.06 @ 30°C	
Image Performance		
LCD Display	High Resolution 3.5" Color LCD, 640 x 480	
Visible Camera	1.3 Megapixel CMOS Sensor	
Lens Parameter		
Field of View	25° x 19°	
Focus Range	0.1 m to ∞	
Focus Type	Manual	
Spatial Resolution	1.37 mrad	
Measurement Analysis		
Measurement Range	Low/High Temperature Switchable: -4° to 356°F (-20° to 180°C) or 212° to 1112°F (100° to 600°C)	
Measurement Accuracy	Greater of ±2% of reading or ±2°C. Instrument is not calibrated below -10°C.	
Image Control	11 Display Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White	
	Image Adjustment: Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Auto Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Areas, Lines, Isotherms, Delta T	
Number of Measurement Spots	1 Hot, 1 Cold, plus 2 Adjustable	
Number of Measurement Areas	3	
Number of Measurement Lines	1 Vertical, 1 Horizontal	
T Reflect	Manual Adjustment	
T Correct	Manual Adjustment	
Digital Zoom	2 X or 4 X	
Thermal/Visible Image	Toggle between Thermal and Visible	
Alarm	High and Low Temperature Audible and Visible Alarm; Isotherm Visible Alarm	
Temperature Scale	User Selectable:°C, °F, and K	
User Settings	Date/Time, Temperature Unit and 11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Emissivity Range	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table	

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Specifications subject to change without notice.



IP54

*Export Licensing fee on 30Hz models may be required for your country, subject to US Government approval. No Export License required on 9Hz models.

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Image Storage		
Removable Storage	2GB SD / Time Stamped	
Storage Mode	Manual Single Image Save or Programmable Auto Save to SD Card	
File Format (Thermal)	JPEG plus Temperature in 14 bit data	
File Format (Visible)	JPEG	
File Size	100K (Typical Value)	
Voice Annotation	Maximum 45 seconds per image	
Laser		
Laser Pointer	Class 2, < 1mW / 635nm, Red	
Record		
Report Analysis Software	Yes	
Video Output	User Selectable PAL and NTSC	
Freeze Frame/Save Image	Freeze Frame and Save Image, Thermal and/or Visible to SD Card	
Environment		
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity	≤ 90% non-condensing	
IP Rating	IP 54	
Power		
Power	1 Rechargeable Lithium Ion Battery	
Operating Time	2 Batteries provide ≥ 4 plus hours operation	
Power Save Mode	Yes	
Charging System	External AC Mains Battery Charger included; In Camera Charging with optional AC Battery Charger	
General Info		
Housing	Impact Resistant Molded Plastic with Wrist Strap	
Mounting	Hand Held with Tripod mounting / 1/4"-20 Thread	
Dimensions	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm)	
Weight (w/o battery)	1.65 lbs (0.75 Kg)	
Software Compatibility	Microsoft Windows 2000, Windows XP, Windows Vista, and Windows 7	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; Video Out Cable; AC Mains Battery Charger; Report & Analysis Software; User Manual, SD Card and Reader.	
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Auxillary Charging Package includes: Car Charger, AC mains charger, and International Plugs	
Safety Certificates		
Shock Test	25G, IEC68-2-29	
Vibration Test	2G, IEC68-2-6	
Immunity Tests	Yes	
Emission Limits	Yes	

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